

## CLAIMS:

- Sue C9*
1. (Amended) A peptide which comprises an analogue of the carboxyl-terminal sequence of a growth hormone, said carboxyl-terminal sequence containing amino acid residues 177-191 of human growth hormone:  
Leu-Arg-Ile-Val-Gln-Cys-Arg-Ser-Val-Glu-Gly-Ser-Cys-Gly-Phe,  
or a corresponding sequence of a non-human mammalian growth hormone; wherein in said analogue  
(i) amino acids at positions 182 and 189 of hGH are joined by a bond to promote a cyclic conformation; and/or  
(ii) amino acids at positions 183 and 186 of hGH are joined by a salt bridge or a covalent bond;  
or an organic or inorganic acid addition salt thereof.
2. (Cancelled).
3. (Cancelled).
4. (Cancelled).
5. (Cancelled).
6. (Cancelled).
7. (Amended) A peptide according to claim 1, wherein the bond between amino acids at positions 182 and 189 is a disulfide bond.

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8. (Amended) A peptide according to claim 1, wherein the amino acids at positions 182 and 189 are selected from the group consisting of L-Cys, D-Cys, L-Pen and D-Pen.
9. (Amended) A peptide according to claim 16, wherein the amino acids at positions 183 and 186 are joined by a salt bridge, and are (X and Y) or (Y and X), respectively, where:  
X is a positively charged amino acid, and  
Y is a negatively charged amino acid.
10. A peptide according to claim 9, wherein X is selected from the group consisting of L- or D-Arg, Lys and Orn, and Y is selected from the group consisting of L- or D-Asp and Glu.
11. (Amended) A peptide according to claim 1, wherein the amino acids at positions 183 and 186 are joined by an amide covalent bond.
12. (Amended) A peptide according to claim 11, wherein the amino acids at positions 183 and 186 are (X and Y) or (Y and X), respectively, where:  
X is selected from the group consisting of L- or D- Lys and Orn, and  
Y is selected from the group consisting of L- or D- Asp and Glu.
13. (Amended) A peptide of the sequence:  
 $X^1m\text{-Leu}\text{-Arg}\text{-Ile}\text{-Val}\text{-Gln}\text{-Cys}\text{-Arg}\text{-Ser}\text{-Val}\text{-Glu}\text{-Gly}\text{-Ser}\text{-Cys}\text{-Gly}\text{-Phe}\text{-}X^2n$   
wherein  $X^1$  and  $X^2$  are each selected from the group consisting of L- or D- Arg, His, Lys and Tyr, and m and n are each 0, 1, 2 or 3 with the proviso that at least m or n is 1;

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a cyclic disulfide thereof or an organic or inorganic acid addition salt thereof.

14. (Amended) A peptide of the sequence:  
 $\text{Y}^1\text{-Leu-Arg-Ile-Val-Gln-Cys-Arg-Ser-Val-Glu-Gly-Ser-Cys-Gly-Phe}$   
 wherein  $\text{Y}^1$  is selected from the group consisting of the desamino form (H), acetyl ( $\text{CH}_3\text{CO-}$ ) and other acyl groups;  
 a cyclic disulfide thereof or an organic or inorganic acid addition salt thereof.
15. (Amended) A peptide of the sequence:  
 $\text{Leu-Arg-Ile-Val-Gln-Cys-Arg-Ser-Val-Glu-Gly-Ser-Cys-Gly-Phe-Y}^2$   
 wherein  $\text{Y}^2$  is selected from the group of  $\text{CONH}_2$  and alkyl amide groups;  
 a cyclic disulfide thereof or an organic or inorganic acid addition salt thereof.
16. (Amended) A peptide which is selected from the group consisting of:

Ref No.	STRUCTURE
9502	Leu Arg Ile Val Gln <u>Pen</u> Arg Ser Val Glu Gly Ser <u>Pen</u> Gly Phe
9405	<u><math>\text{CH}_3\text{CO-}</math></u> Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe
9410	<u>H</u> - Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe
9404	Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe - <u><math>\text{CONH}_2</math></u>
9407	Leu Arg Ile Val Gln Cys <u>Lys</u> Ser Val Glu Gly Ser Cys Gly Phe
9408	Leu Arg Ile Val Gln Cys <u>Lys</u> Ser Val Glu Gly Ser Cys Gly Phe <div style="text-align: center;">(amide bond)</div>
9604	<u>Tyr</u> Leu Arg II Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe

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9605	<u>Lys</u> Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe
9618	<u>Lys</u> <u>Lys</u> Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe
9607	<u>Ala</u> Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe
9606	Leu <u>Lys</u> Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe
9608	Leu Arg <u>Ala</u> Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe
9403	Leu Arg <u>Lys</u> Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe
9609	Leu Arg Ile <u>Ala</u> Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe
9610	Leu Arg Ile Val <u>Ala</u> Cys Arg Ser Val Glu Gly Ser Cys Gly Phe
9612	Leu Arg Ile Val Gln Cys Arg <u>Ala</u> Val Glu Gly Ser Cys Gly Phe
9613	Leu Arg Ile Val Gln Cys Arg Ser <u>Ala</u> Glu Gly Ser Cys Gly Phe
9615	Leu Arg Ile Val Gln Cys Arg Ser Val Glu <u>Ala</u> Ser Cys Gly Phe
9616	Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly <u>Ala</u> Cys Gly Phe
9602	Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys <u>Ala</u> Phe
9501	Leu Arg Ile Val Gln Cys Arg Ser Val Glu <u>D-Ala</u> Ser Cys <u>D-Ala</u> Phe
9601	Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly <u>Ala</u>

wherein the amino acid residue abbreviations used are in accordance  
with the standard peptide nomenclature:

Gly	=	Glycine;	Ile	=	Isoleucine;
Glu	=	Glutamic Acid;	Phe	=	Phenylalanine;
Cys	=	Cysteine;	Arg	=	Arginine;
Gln	=	Glutamine;	Leu	=	Leucine;
Ser	=	Serine;	Val	=	Valine;
Lys	=	Lysine;	Ala	=	Alanine;
Asp	=	Aspartic acid;	His	=	Histidine;

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Orn = Ornithine; Tyr = Tyrosine;

Pen = Penicillamine ( $\beta,\beta'$ -Dimethyl-Cysteine).

wherein all amino acids, except for glycine, are of the L-absolute configuration, unless indicated as D-absolute configuration, and the peptide has a cyclic disulfide bond between Cys(182) and Cys(189) or Pen(182) and Pen(189) as appropriate,

or an organic or inorganic acid addition salt thereof.

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17. (Amended) A method for the treatment of obesity in an animal, which comprises administering to the animal an effective amount of a peptide according to *any one of claims 1 or 7 to 16.*
  18. A method according to claim 17, wherein the animal is a human.
  19. (Cancelled).
  20. (Cancelled).
  21. (Cancelled).
  22. (Cancelled).
  23. (Cancelled).
  24. (Cancelled).
  25. (Cancelled).
  26. (Cancelled).

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27. (Cancelled).

28. (Cancelled).

29. (Cancelled).

30. (Cancelled).

31. (Cancelled).

32. (Cancelled).

33. (Cancelled).

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34. (Amended) A method according to claim 17 or claim 18, wherein  
the peptide is administered orally.

*Sut C12 A*  
35. (Amended) Use of a peptide according to any one of claims 1  
or 7 to 16 in the manufacture of a pharmaceutical composition for the  
treatment of obesity in an animal.

*Sut C13 A*  
36. (Amended) A pharmaceutical composition for use in the  
treatment of obesity in an animal, which comprises an effective amount  
of a peptide according to *Claim 1* or *any one of claims 1 to 7 or 16*, together with  
one or more pharmaceutically acceptable carriers and/or diluents.

*Add a1*